TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) CURRICULUM IMPLEMENTATION: A SOLUTION TO THE NATIONAL DWINDLING ECONOMY

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Abstract

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Technical and Vocational Education and Training (TVET) curriculum implementation in Nigeria has Technical and Vocational Education and Training (1) as a result of these constraints, the industrial and continue to suffer with so many number of challenges, as a result of these constraints, the industrial and continue to suffer with so many number of challenges, as a result of these constraints, the industrial and to continue to suffer with so many number of charlenges, as economic development in the country remain stagnant. This paper stressed on Technical and Vocational economic development in the country remain stagnant. economic development in the country remain stagnam. The property of the national dwindling Education and Training (TVET) curriculum implementation: A solution to the national dwindling economic. The paper highlighted the important of TVET and National Development, the status of TVET economic. The paper nightighted the important of the curriculum implementation for economic curriculum implementation in Nigeria and monitoring TVET curriculum implementation for economic TVET. development. It was concluded that if Nigeria must be out from the dwindling economic, TVET curriculum implementation must be effective through ensuring total overhauling of government commitment in the provision of all the required input facilities as well as improve budgetary allocation. It was recommended that government should re-emphasize on compulsory inter-linkages between institutions implementing TVET curriculum and relevant industrial sectors in order to assist learners with both theory and practical skills needed for effective enterprising after graduation and develop a special strategy on how to motivate highly rated performing TVET teacher and student for achieving maximum input and output during the curriculum implementation.

Introduction

The dwindling economic status of the nation is as a result of the constraints to the effective implementation of TVET. Technical and Vocational Skills plays an important role towards empowering Micro, Small and Medium Enterprises Sectors of the Nation. According to Longmas (2011), the secret of the achievements recorded by countries such as Japan, Singapore, Brazil and Malaysia in industrializing their economic is through effective technical and vocational skills to their citizenry. But in Nigeria, the story is not the same as the economic continues worsen because of the kind of the kind of skills possessed by graduates of technical and vocational institutions is not adequately enough to stimulate growth. Nweke (2006) explained this fact, when he noted that insufficient and inadequate skills workforce has been a major threat to the anticipated growth and survival of the Nigeria industrial sector. Also according to Nwadi (2002) who submitted that all other problems in every area of endeavour in Nigeria can be seen to be an off-shoot of the economic crunch that Nigeria is bedeviled with.

Even though the Federal Republic of Nigeria (FRN) through the National Policy on Education (NPE) have developed many educational programmes and policies that when properly implemented will boost the national economic development, among these educational programmes TVET inclusive. TVET is defined as "a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of the economic and social life" (FRN, 2013).

FRN further outlined the objectives of TVET in the country to include provision of trained manpower in applied science, technology and business particularly at craft, advance craft and technical levels, provide technical knowledge and vocational skills necessary for agriculture, commercial and economic development, and give training and impart the necessary skills to individual for self-reliance economically. These laudable objectives can only be achieved when the government has full commitment for TVET curriculum implementation.

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Curriculum implementation is the teachers and learners are involved in a negotiation aimed at promoting learning with the teachers adopting appropriate teaching methods and materials to guide students learning (Efedi, 2010). It is indeed the practical action oriented phase of the curriculum process, the trying out stage of the identified objectives, content or subject matter, learning experiences, evaluation and all the objectives- cognitive, affective and psycho-motor require instructional materials that reflect same which round individual and the nation at large.

Despite the laudable TVET curriculum developed by NBTE in conjunction with UNESCO in Nigeria, lack of qualified teachers, failure to supply enough teaching materials, insufficient funding and other relevant related problems still militate against the effective TVET curriculum implementation in our institution and centre for TVET programme. In support of this is Baigelo (2010) who reported that investment in TVET in first, second and third development plans were 0.01%, 0.36% and 0.84% respectively as compared to 26% of national budget recommended by UNESCO, these rates of investment are totally inadequate and can't get much done in the institutional established for functional TVET curriculum implementation. Once government change their attitude and positively focus more on effective implementation of TVET curriculum, the nation will be rich with high supply of adequate skilled workforce that will in turn lead to national economic development.

TVET and National Development

TVET is a form of practical skill acquisition type of education that aimed at preparing an individual(s) for employment in an occupation or trade. Idialu (2007) explained that TVET is form of education, training or retraining which is directed towards developing the learner to become productive either in a paid employment or in self-employment. It is the type of training which targeted a developing not practical skills but also attitudes and habits that make the recipient creative, motivate and resourceful (Uwaifo, 2009). When individual is properly trained with employable skills, the nation will equally be boosted with skilled workforce for the national economic development.

Adekoya (2004) claimed that for the Nigerian youth to be empowered economically they should be given the necessary skill acquisition and for this to be done the curriculum should be effectively implemented. Oli (2000) believed that to ensure a positive future for Nigeria, the youth who are believed to be the future leaders of the country ought to be well equipped with basic skills to drive the economy. When the youth acquired appropriate skill, they drive the country economic, hence facilitate national development easily.

The government of Nigeria has recognized the status of TVET curriculum implementation for the national economic development. Consequently, TVET has been part of its national development strategies because of the impact on human resources development and productivity (Dike, 2007). This is to conclude that TVET holds the keys to National development. Supporting this is Ezekwezili (2007) posited that the citizen of a nation must be appropriately and adequately skilled before they can fights unemployment and poverty. She further stated, there is no record of any nation that has developed without addressing the technological development of its citizens. Basically, if people lack technical skills and knowledge the natural resources will tend to remain unutilized and underutilized and the nation remains stagnant. According to Allen (2012) an integrated part of the national development strategies in many countries of the world because of its impact on productivity and economic growth. A nation cannot develop without well-equipped technical and vocational institutions for imparting and training youth and women on the practical skills that will yield development in such nation.

African response to the development of the scientific and technological capacities has traditionally been through the introduction of science curriculum and technical and vocational education curriculum in the national education system (Muhammed, 2011). When science and technology education curriculum is properly implemented individual collectively contributes by ways of skills, attitudes, sound morals, and economic resourcefulness thereby ensuring actualization of the national objectives into reality which constitute national development.

Status of TVET Curriculum Implementation in Nigeria

It is very difficult to implement a TVET curriculum successfully if the education system has limited

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funding capacities. Under funding raise a lot of other implications on the part of curriculum development of a nation will determine the success of curriculum funding capacities. Under funding raise a lot of other implementation will determine the success of curriculum implementation. The economy development of a nation will determine the success of curriculum implementation is capital intensive and has numerous advantage. implementation. TVET curriculum implementation is capital intensive and has numerous advantages a implementation. TVET curriculum implementation building the right attitude to work, technical and vocation and vocation is capital intensive and has numerous advantages a implementation. implementation. The economy developmentation is capital intensive and wantages a implementation. 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- Inadequate tools and equipment, 1.
- Lack of qualified technical and vocational education teachers, 2.
- Poor image given to technical and vocational education courses 3.
- Lack of guidance services for the student 4.

Also highlighting the problems militating against the actualization of the goal of TVET as at present in Nigeria is Onuegbu (2005) who classified them as follow:

- Faulty academic curriculum
- Problems of defective admission of student method 2.
- Insufficient infrastructural facilities 3.
- Structure/nomenclature problems 4.
- 5. Poor funding
- Resources persons motivational constraints 6.
- 7. Personnel/staffing problems
- Poor rating/non recognition of technical graduates

It has been observed that in most of the technical and vocational institutions in Nigeria with an exception of the newly built, infrastructure is in a deplorable condition. Kelly (2009) described the buildings as "dilapidated, unsafe and sometimes unusable. In certain instances, some technical and vocational institutions have inadequate classroom accommodation and furniture is also inadequate in most in some cases the seats and desks are battered or totally absent.

Monitoring TVET Curriculum Implementation for Economic Development

To ensure effective TVET curriculum implementation there must be regular monitoring and inspection in order to deal with the challenges posed in the process. African Union (2007) observed that the challenges besetting TVET sector are multi-dimensional and more colossal. They serve as a road block to our quest for national development. The socio-economic environmental and the contextual framework in which TVET delivery systems currently operate is characterized by uncoordinated, unregulated and fragmented delivery systems, poor public perception, poor policy implementation, weak monitoring and evaluation mechanism.

Monitoring TVET curriculum implementation is an on-going process that is focused on the assessment of programme and those days-to-day activities and deliverables required for achievement and performance. According to Department of Higher Education Training Republic of South Africa (2015) monitoring has an internally focused emphasis on the efficiency of programme implementation. During the planning phase of monitoring, the type of data to be collected, its format and frequency are defined. It is thus implicit in this exposition that monitoring in an on-going process with relevant activities that leads to the envisaged output and activities.

In order to have quality output in different type of educational programme including TVET, Nigerian government saw the need for the provision fund as the only activity but also the monitoring system. Educationalists at the ministries of education at federal, state and local level of government have set up quality control division in their respective ministries to ensure that quality education is maintained. Quality TVET curriculum implementation can only be assured through regular technical college monitoring system as noted by Fadine (1998) that monitoring system as noted by Fadipe (1998), that quality and standard in any system of education could be maintained through regular inspection and acquired and standard in any system of education could be maintained through regular inspection and continuous supervision of instructions of educational services as laid down in the national policy or education services as laid down in the national policy on education.

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Monitoring and inspection have identified as crucial for the daily operation and function of training institutions since they assess and record the performance of teachers, their ability and consistency in carrying out intellectually challenging teaching and keeping of high quality records (Mortimore, 1998). They also involve the assessment of effectiveness of communication among teachers and between the students and their teachers.

It was concluded that if Nigeria must be out from the dwindling economic, TVET curriculum implementation must be effective through ensuring total overhauling of government commitment in the provision of all the required input facilities, improve budgetary allocation as well as improve regular monitoring and inspection of the TVET institutions for the purpose of improve implementation that will yield positive oriented result.

Recommendations

- Government should re-emphasize on compulsory inter-linkages between institutions implementing TVET curriculum and relevant industrial sectors in order to assist learners with both theory and practical skills needed for effective enterprising after graduation.
- Government should develop a special strategy on how to motivate highly rated performing TVET 2. teacher and student for achieving maximum input and output during the curriculum implementation.
- TVET teachers and students should develop more conscience commitment towards teaching and 3. acquiring the necessary skills needed for an improve economic development in Nigeria
- Government should develop and update an acceptable data template form for collecting 4. information by experience TVET professional monitoring team during their visitation to technical and vocation institutions.

References

- Adekoya, M. N. (2004). The Importance of Communication in Curriculum Implementation, Lagos: University Press
- Aworanti, O. (2011). NABTEB boss wants Nigerians to embrace technical education. Nigeria Schools Blog. Benin
- Baiyelo, T. D. (2010). Vocational training for tertiary education in Nigeria. African centre for comtemporary studies. Assessed on 5th July, 2017 from www.accs.org.uk
- Dike, V. E. (2007). Vocational education missing link in Nigeria's development policy. http://Country Side, Us/NIG/56.htm. Accessed 4th May, 2015
- Efedi, O. E. (2010). The challenge of curriculum implementation in Nigeria schools. In (Eds) Iloputaife, E. D., Maduwesi, B. U and Igbo, R. O. (2010). Issue and challenges in Nigeria Education in the 21st Century. 257-278. Uyo
- Ezekwezili, O. (2007). Remarks of the Minister of Education of the Occasion of the Opening Ceremonies of the 1st International Conference and Exhibition on the TVE at Abuja Sheraton Hotels and Towers, on Wednesday, 28th March, 2007.
- Fadipe, J. O. (1998). Quality Control in Education" in Management of Nigeria Education, Law, structures and responsibilities, J.O (Eds). National Institute for Educational planning and Administration (NIEPA). Ibadan
- Federal Republic of Nigeria (2013). National Policy on Education, 5th edition. Abuja: NERDC Press
- Idialu, E. (2007). Quality assurance in the teaching and examination of vocational and technical education in Nigeria. College Student Journal. Retrieved on 17 June 2011 from htt://findarticles.com/p/articles

Enhancing Science and Technology Education in A Dwindling Economy

- Longmas, S. W. (2011). Technical and vocational education training for sustainable industrial development of Nigeria. A key note address Presented at the 24th Annual Conference of Nigerian Association of Teachers of Technology held at Federal College of Eduacation (Technical), Umunze, from 18th 21th October
- Mohammed, A. (2011). Managing the challenges of technical and vocational education and training in Nigeria for National development. A paper presented at NATT Conference at Umunze from 18th 21" October
- Nwadi, K. C. (2002). Evaluation of gifted educational practices: A case study of Suleja Academy. Unpublished Master's thesis. University of Nigeria, Nsukka.
- Nweke, S. T. (2006). The attitude of Nigerians to Nigeria made goods: Implications for counseling. Unpublished Master's thesis. University of Jos, Jos
- Ogbazi, N. J. (2004). Strategies for improving vocational programme under the general education. The Nigerian Journal of Education (1)43-50
- Onuegbu, C. I. (2005). Repositioning vocational and technical education in Nigeria. A tool for economic advancement. Paper presented at the 4th Annual National Conference of NARD held at the UNIPORT, August 15th 19th.
- Okoro, I. F. (2010). Challenges in effective curriculum implementation at Primary Education level in Nigeria. In (Eds) Iloputaife, E. D., Maduwesi, B. U and Igbo, R. O. (2010). Issue and challenges in Nigeria Education in the 21st Century. 279–287. Uyo
- Oli, A.N., (2000), The Concept and Nature of Curriculum in Nigeria, Lagos: Macmillan Publishers
- Uwaifo, V. O. (2009). Industrializing the Nigeria society through creative skill acquisition in vocational and technical education programme. International NGO Journal. 4(4), pp. 142-145, Accessed from htt://www.academicjournas.org/INGOJ